

## SEQUENCE LISTING

&lt;110&gt; University of Rochester

Giger, Roman J.

<120> IDENTIFICATION OF NOVEL NOGO-RECEPTORS  
AND METHODS RELATED THERETO

&lt;130&gt; 21108.0028P1

&lt;140&gt; Unassigned

&lt;141&gt; 2004-04-02

&lt;150&gt; 60/460,849

&lt;151&gt; 2003-04-04

&lt;160&gt; 29

&lt;170&gt; FastSEQ for Windows Version 4.0

&lt;210&gt; 1

&lt;211&gt; 473

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:/Note =  
Synthetic Construct

&lt;400&gt; 1.

Met	Lys	Arg	Ala	Ser	Ser	Gly	Gly	Ser	Arg	Leu	Leu	Ala	Trp	Val	Leu	1	5	10	15
Trp	Leu	Gln	Ala	Trp	Arg	Val	Ala	Thr	Pro	Cys	Pro	Gly	Ala	Cys	Val	20	25	30	
Cys	Tyr	Asn	Glu	Pro	Lys	Val	Thr	Thr	Ser	Cys	Pro	Gln	Gln	Gly	Leu	35	40	45	
Gln	Ala	Val	Pro	Thr	Gly	Ile	Pro	Ala	Ser	Ser	Gln	Arg	Ile	Phe	Leu	50	55	60	
His	Gly	Asn	Arg	Ile	Ser	Tyr	Val	Pro	Ala	Ala	Ser	Phe	Gln	Ser	Cys	65	70	75	80
Arg	Asn	Leu	Thr	Ile	Leu	Trp	Leu	His	Ser	Asn	Ala	Leu	Ala	Gly	Ile	85	90	95	
Asp	Ala	Ala	Ala	Phe	Thr	Gly	Leu	Thr	Leu	Leu	Glu	Gln	Leu	Asp	Leu	100	105	110	
Ser	Asp	Asn	Ala	Gln	Leu	Arg	Val	Val	Asp	Pro	Thr	Thr	Phe	Arg	Gly	115	120	125	
Leu	Gly	His	Leu	His	Thr	Leu	His	Leu	Asp	Arg	Cys	Gly	Leu	Gln	Glu	130	135	140	
Leu	Gly	Pro	Gly	Leu	Phe	Arg	Gly	Leu	Ala	Ala	Leu	Gln	Tyr	Leu	Tyr	145	150	155	160
Leu	Gln	Asp	Asn	Asn	Leu	Gln	Ala	Leu	Pro	Asp	Asn	Thr	Phe	Arg	Asp	165	170	175	
Leu	Gly	Asn	Leu	Thr	His	Leu	Phe	Leu	His	Gly	Asn	Arg	Ile	Pro	Ser	180	185	190	
Val	Pro	Glu	His	Ala	Phe	Arg	Gly	Leu	His	Ser	Leu	Asp	Arg	Leu	Leu	195	200	205	

```

Leu His Gln Asn His Val Ala Arg Val His Pro His Ala Phe Arg Asp
 210                               215                220
Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Met
225                               230                235                240
Leu Pro Ala Glu Val Leu Val Pro Leu Arg Ser Leu Gln Tyr Leu Arg
                               245                250                255
Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp
                               260                265                270
Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro Cys Asn
                               275                280                285
Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala Ala Ser
                               290                295                300
Asp Leu Glu Gly Cys Ala Val Ala Ser Gly Pro Phe Arg Pro Phe Gln
305                               310                315                320
Thr Asn Gln Leu Thr Asp Glu Glu Leu Leu Gly Leu Pro Lys Cys Cys
                               325                330                335
Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly Arg Pro
                               340                345                350
Ala Ser Ala Gly Asn Ala Leu Lys Gly Arg Val Pro Pro Gly Asp Thr
                               355                360                365
Pro Pro Gly Asn Gly Ser Gly Pro Arg His Ile Asn Asp Ser Pro Phe
                               370                375                380
Gly Thr Leu Pro Gly Ser Ala Glu Pro Pro Leu Thr Ala Leu Arg Pro
385                               390                395                400
Gly Gly Ser Glu Pro Pro Gly Leu Pro Thr Thr Gly Pro Arg Arg Arg
                               405                410                415
Pro Gly Cys Ser Arg Lys Asn Arg Thr Arg Ser His Cys Arg Leu Gly
                               420                425                430
Gln Ala Gly Ser Gly Ser Ser Gly Thr Gly Asp Ala Glu Gly Ser Gly
                               435                440                445
Ala Leu Pro Ala Leu Ala Cys Ser Leu Ala Pro Leu Gly Leu Ala Leu
                               450                455                460
Val Leu Trp Thr Val Leu Gly Pro Cys
465                               470

```

&lt;210&gt; 2

&lt;211&gt; 286

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:/Note =  
 Synthetic Construct

&lt;400&gt; 2

```

Pro Val Thr Pro Ser Cys Pro Met Leu Cys Thr Cys Tyr Ser Ser Pro
 1                               5                10                15
Pro Thr Val Ser Cys Gln Ala Asn Asn Phe Ser Ser Val Pro Leu Ser
                               20                25                30
Leu Pro Pro Ser Thr Gln Arg Leu Phe Leu Gln Asn Asn Leu Ile Arg
                               35                40                45
Ser Leu Arg Pro Gly Thr Phe Gly Pro Asn Leu Leu Thr Leu Trp Leu
                               50                55                60
Phe Ser Asn Asn Leu Ser Thr Ile Tyr Pro Gly Thr Phe Arg His Leu
65                               70                75                80
Gln Ala Leu Glu Glu Leu Asp Leu Gly Asp Asn Arg His Leu Arg Ser
                               85                90                95
Leu Glu Pro Asp Thr Phe Gln Gly Leu Glu Arg Leu Gln Ser Leu His
                               100                105                110

```

```

Leu Tyr Arg Cys Gln Leu Ser Ser Leu Pro Gly Asn Ile Phe Arg Gly
   115           120           125
Leu Val Ser Leu Gln Tyr Leu Tyr Leu Gln Glu Asn Ser Leu Leu His
   130           135           140
Leu Gln Asp Asp Leu Phe Ala Asp Leu Ala Asn Leu Ser His Leu Phe
  145           150           155           160
Leu His Gly Asn Arg Leu Arg Leu Leu Thr Glu His Val Phe Arg Gly
           165           170           175
Leu Gly Ser Leu Asp Arg Leu Leu Leu His Gly Asn Arg Leu Gln Gly
           180           185           190
Val His Arg Ala Ala Phe His Gly Leu Ser Arg Leu Thr Ile Leu Tyr
   195           200           205
Leu Phe Asn Asn Ser Leu Ala Ser Leu Pro Gly Glu Ala Leu Ala Asp
   210           215           220
Leu Pro Ala Leu Glu Phe Leu Arg Leu Asn Ala Asn Pro Trp Ala Cys
  225           230           235           240
Asp Cys Arg Ala Arg Pro Leu Trp Ala Trp Phe Gln Arg Ala Arg Val
           245           250           255
Ser Ser Ser Asp Val Thr Cys Ala Thr Pro Pro Glu Arg Gln Gly Arg
           260           265           270
Asp Leu Arg Thr Leu Arg Asp Thr Asp Phe Gln Ala Cys Pro
   275           280           285

```

&lt;210&gt; 3

&lt;211&gt; 420

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:/Note =  
Synthetic Construct

&lt;400&gt; 3

```

Met Leu Pro Gly Leu Arg Arg Leu Leu Gln Gly Pro Ala Ser Ala Cys
  1           5           10           15
Leu Leu Leu Thr Leu Leu Ala Leu Pro Pro Val Thr Pro Ser Cys Pro
   20           25           30
Met Leu Cys Thr Cys Tyr Ser Ser Pro Pro Thr Val Ser Cys Gln Ala
   35           40           45
Asn Asn Phe Ser Ser Val Pro Leu Ser Leu Pro Pro Ser Thr Gln Arg
   50           55           60
Leu Phe Leu Gln Asn Asn Leu Ile Arg Ser Leu Arg Pro Gly Thr Phe
  65           70           75           80
Gly Pro Asn Leu Leu Thr Leu Trp Leu Phe Ser Asn Asn Leu Ser Thr
           85           90           95
Ile Tyr Pro Gly Thr Phe Arg His Leu Gln Ala Leu Glu Glu Leu Asp
   100           105           110
Leu Gly Asp Asn Arg His Leu Arg Ser Leu Glu Pro Asp Thr Phe Gln
   115           120           125
Gly Leu Glu Arg Leu Gln Ser Leu His Leu Tyr Arg Cys Gln Leu Ser
   130           135           140
Ser Leu Pro Gly Asn Ile Phe Arg Gly Leu Val Ser Leu Gln Tyr Leu
  145           150           155           160
Tyr Leu Gln Glu Asn Ser Leu Leu His Leu Gln Asp Asp Leu Phe Ala
           165           170           175
Asp Leu Ala Asn Leu Ser His Leu Phe Leu His Gly Asn Arg Leu Arg
           180           185           190
Leu Leu Thr Glu His Val Phe Arg Gly Leu Gly Ser Leu Asp Arg Leu
   195           200           205
Leu Leu His Gly Asn Arg Leu Gln Gly Val His Arg Ala Ala Phe His
  210           215           220

```

Gly Leu Ser Arg Leu Thr Ile Leu Tyr Leu Phe Asn Asn Ser Leu Ala  
 225 230 235 240  
 Ser Leu Pro Gly Glu Ala Leu Ala Asp Leu Pro Ala Leu Glu Phe Leu  
 245 250 255  
 Arg Leu Asn Ala Asn Pro Trp Ala Cys Asp Cys Arg Ala Arg Pro Leu  
 260 265 270  
 Trp Ala Trp Phe Gln Arg Ala Arg Val Ser Ser Ser Asp Val Thr Cys  
 275 280 285  
 Ala Thr Pro Pro Glu Arg Gln Gly Arg Asp Leu Arg Thr Leu Arg Asp  
 290 295 300  
 Thr Asp Phe Gln Ala Cys Pro Pro Pro Thr Pro Thr Arg Pro Gly Ser  
 305 310 315 320  
 Arg Ala Arg Gly Asn Ser Ser Ser Asn His Leu Tyr Gly Val Ala Glu  
 325 330 335  
 Ala Gly Ala Pro Pro Ala Asp Pro Ser Thr Leu Tyr Arg Asp Leu Pro  
 340 345 350  
 Ala Glu Asp Ser Arg Gly Arg Gln Gly Gly Asp Ala Pro Thr Glu Asp  
 355 360 365  
 Asp Tyr Trp Gly Gly Tyr Gly Gly Glu Asp Gln Arg Gly Glu Gln Thr  
 370 375 380  
 Cys Pro Gly Ala Ala Cys Gln Ala Pro Ala Asp Ser Arg Gly Pro Val  
 385 390 395 400  
 Leu Ser Ala Gly Leu Arg Thr Pro Leu Leu Cys Leu Leu Leu Leu Ala  
 405 410 415  
 Pro His His Leu  
 420

&lt;210&gt; 4

&lt;211&gt; 175

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:/Note =  
 Synthetic Construct

&lt;400&gt; 4

Asn Gly Asn Ala Trp Asp Cys Gly Cys Arg Ala Arg Ser Leu Trp Glu  
 1 5 10 15  
 Trp Leu Arg Arg Phe Arg Gly Ser Ser Ser Val Val Pro Cys Ala Thr  
 20 25 30  
 Pro Glu Leu Arg Gln Gly Gln Asp Leu Lys Ser Leu Arg Val Glu Asp  
 35 40 45  
 Phe Arg Asn Cys Thr Gly Pro Ala Ser Pro His Gln Ile Lys Ser His  
 50 55 60  
 Thr Leu Ser Thr Ser Asp Arg Ala Ala Arg Lys Glu His His Pro Ser  
 65 70 75 80  
 His Gly Ala Ser Arg Asp Lys Gly His Pro His Gly His Leu Pro Gly  
 85 90 95  
 Ser Arg Ser Gly Ser Lys Lys Pro Gly Lys Asn Cys Thr Ser His Arg  
 100 105 110  
 Asn Arg Asn Gln Ile Ser Lys Gly Ser Ala Gly Lys Glu Leu Pro Glu  
 115 120 125  
 Leu Gln Asp Tyr Ala Pro Asp Tyr Gln His Lys Phe Ser Phe Asp Ile  
 130 135 140  
 Met Pro Thr Ala Arg Pro Lys Arg Lys Gly Lys Cys Ala Arg Arg Thr  
 145 150 155 160  
 Pro Ile Arg Ala Pro Ser Gly Val Gln Gln Ala Ser Ser Gly Thr  
 165 170 175

&lt;210&gt; 5

&lt;211&gt; 445

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:/Note =  
Synthetic Construct

&lt;400&gt; 5

```

Met Leu Arg Lys Gly Cys Cys Val Glu Leu Leu Leu Leu Leu Ala
 1          5          10          15
Gly Glu Leu Pro Leu Ser Gly Gly Cys Pro Arg Asp Cys Val Cys Tyr
 20          25          30
Pro Ser Pro Met Thr Val Ser Cys Gln Ala His Asn Phe Ala Ala Ile
 35          40          45
Pro Glu Gly Ile Pro Glu Asp Ser Glu Arg Ile Phe Leu Gln Asn Asn
 50          55          60
His Ile Thr Phe Leu Gln Gln Gly His Phe Ser Pro Ala Met Val Thr
 65          70          75          80
Leu Trp Ile Tyr Ser Asn Asn Ile Thr Phe Ile Ala Pro Asn Thr Phe
 85          90          95
Glu Gly Phe Val His Leu Glu Glu Leu Asp Leu Gly Asp Asn Arg Gln
100          105          110
Leu Arg Thr Leu Ala Pro Glu Thr Phe Gln Gly Leu Val Lys Leu His
115          120          125
Ala Leu Tyr Leu Tyr Lys Cys Gly Leu Ser Ser Leu Pro Ala Gly Ile
130          135          140
Phe Gly Gly Leu His Ser Leu Gln Tyr Leu Tyr Leu Gln Asp Asn His
145          150          155          160
Ile Glu Tyr Leu Gln Asp Asp Ile Phe Val Asp Leu Val Asn Leu Ser
165          170          175
His Leu Phe Leu His Gly Asn Lys Leu Trp Ser Leu Gly Gln Gly Ile
180          185          190
Phe Arg Gly Leu Val Asn Leu Asp Arg Leu Leu Leu His Glu Asn Gln
195          200          205
Leu Gln Trp Val His His Lys Ala Phe His Asp Leu His Arg Leu Thr
210          215          220
Thr Leu Phe Leu Phe Asn Ser Leu Thr Glu Leu Gln Gly Asp Cys
225          230          235          240
Leu Ala Pro Leu Val Ala Leu Glu Phe Leu Arg Leu Asn Gly Asn Ala
245          250          255
Trp Asp Cys Gly Cys Arg Ala Arg Ser Leu Trp Glu Trp Leu Arg Arg
260          265          270
Phe Arg Gly Ser Ser Ser Val Val Pro Cys Ala Thr Pro Glu Leu Arg
275          280          285
Gln Gly Gln Asp Leu Lys Ser Leu Arg Val Glu Asp Phe Arg Asn Cys
290          295          300
Thr Gly Pro Ala Ser Pro His Gln Ile Lys Ser His Thr Leu Ser Thr
305          310          315          320
Ser Asp Arg Ala Ala Arg Lys Glu His His Pro Ser His Gly Ala Ser
325          330          335
Arg Asp Lys Gly His Pro His Gly His Leu Pro Gly Ser Arg Ser Gly
340          345          350
Ser Lys Lys Pro Gly Lys Asn Cys Thr Ser His Arg Asn Arg Asn Gln
355          360          365
Ile Ser Lys Gly Ser Ala Gly Lys Glu Leu Pro Glu Leu Gln Asp Tyr
370          375          380
Ala Pro Asp Tyr Gln His Lys Phe Ser Phe Asp Ile Met Pro Thr Ala
385          390          395          400
Arg Pro Lys Arg Lys Gly Lys Cys Ala Arg Arg Thr Pro Ile Arg Ala
405          410          415

```

Pro Ser Gly Val Gln Gln Ala Ser Ser Gly Thr Ala Leu Gly Val Ser  
                   420                  425                  430  
 Leu Leu Ala Trp Ile Leu Gly Leu Val Val Ser Leu Arg  
                   435                  440                  445

<210> 6  
 <211> 2215  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:/Note =  
 Synthetic Construct

<400> 6  
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 gagggg'gcgcg gacacccgtt gtccagggtc aaccagccc tttccatctc gtcgtgcccc 120  
 gccccgtccc gtcggggccg atggctcctt cagaggcacg gaggccgggg ggcgcagggt 180  
 agagctccgc agccccgcta cgtagcccg gactcccggg tccttacgga gccccgcgga 240  
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 gccccctccc ccgatcgtcg agacaagatg ctgcccgggc tccggcgcct gctgcaagggt 360  
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 gctggggcgt gacacccag gcagccgttg ctctctctc cggggcccca cagtggactc 1920  
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 acccaggaca ctttttaggt gcctggagag atttctctc accatggccc ctgtgtggtg 2160  
 aagataaaaag aaattgtttt ggggaaaaaaa tttattaaaa aattctatta ttttt 2215

<210> 7  
 <211> 1422  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:/Note =  
 Synthetic Construct

&lt;400&gt; 7

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acaagctgcc	cccagcaggg	cctgcaggct	gtacccactg	gcatcccagc	ctccagccag	180
agaatcttcc	tgcacggcaa	ccgaatctct	tacgtgccag	ccgccagctt	ccagtcattg	240
cggaatctca	ccatcctgtg	gctgcactca	aatgcgctgg	ccgggattga	tgccgcggcc	300
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ctacaagaca	acaacctgca	ggcacttccc	gacaacacct	tccgagacct	gggcaacctc	540
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gcagacaagg	cctcagtact	ggaaccggg	aggccggcgt	ctgctggaaa	tgactcaag	1080
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agaaagaacc	gcaccgtag	ccactgccgt	ctgggccagg	caggaagtgg	gagcagtggg	1320
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&lt;210&gt; 8

&lt;211&gt; 2601

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:/Note =  
Synthetic Construct

&lt;221&gt; misc\_feature

&lt;222&gt; (0)...(0)

&lt;223&gt; n = a, t, c, or g

&lt;400&gt; 8

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aagtgcctga gggttgagga cttccggaac tgcactggac cagcgtctcc tcaccagatc 1380
aagtctcaca cgcttagcac ctctgacagg gctgcccgca aggagcacca tccctcccac 1440
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agcactgcca cctgtccagc aaggaaacag aatcttttct tcttttcttt tcttttcttc 1860
taagtggaaag atctgctggg ttccaggaaa aggctgctaa aaccttcagt ccagtgtgga 1920
ccttttttgt ggattaaagc ccaacggtac agctgtagac aggaagggga gcacatctta 1980
cctggctgtc ctgaccgagc acctccggac agtattccac tcagccagtg gtcaaagggc 2040
acaccaagtg agtcgttagt ggtgtcagga catgtgcccc ttgaagaaat gggcttgccg 2100
aatcctggtc acttggaag aagggctgaa ggaccctgct ggtttcggaa ggagcaggac 2160
tcagaacaag gtcacccag agtcagctgg ggcaaacagc aatctcagag cactcttggt 2220
cttgctgag atcacttagt taactggccc tgtccaatcc tatgcctccc tcagtcccta 2280
cccatgaggg taatgcctct cattcctgaa gtctcaggca gtcctggcag acttgctggg 2340
gttcaagaac caatcaccaa aggagagatc gccagaggat gacatataga actttactcg 2400
taatgagagt cacacagaag gtgcagtttt atacctatgt ccacttatat atatattctc 2460
actctgacca cacatccaca taatatatat atatatatta taaatatata aatgcacagg 2520
tcccccaacc cactccttac caaactgtat gtcttatcat gtttataaac tatacgggaa 2580
cctaaaaaaa aaaaagtga a 2601

```

&lt;210&gt; 9

&lt;211&gt; 445

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:/Note =  
Synthetic Construct

&lt;400&gt; 9

```

Met Leu Arg Lys Gly Cys Cys Val Glu Leu Leu Leu Leu Leu Ala
1          5          10          15
Gly Glu Leu Pro Leu Ser Gly Gly Cys Pro Arg Asp Cys Val Cys Tyr
20          25          30
Pro Ser Pro Met Thr Val Ser Cys Gln Ala His Asn Phe Ala Ala Val
35          40          45
Pro Glu Gly Ile Pro Glu Asp Ser Glu Arg Ile Phe Leu Gln Asn Asn
50          55          60
His Ile Thr Phe Leu Gln Gly His Phe Ser Pro Ala Met Val Thr
65          70          75          80
Leu Trp Ile Tyr Ser Asn Asn Ile Thr Phe Ile Ala Pro Asn Thr Phe
85          90          95
Glu Gly Phe Val His Leu Glu Glu Leu Asp Leu Gly Asp Asn Arg Gln
100         105         110
Leu Arg Thr Leu Ala Pro Glu Thr Phe Gln Gly Leu Val Lys Leu His
115         120         125
Ala Leu Tyr Leu Tyr Lys Cys Gly Leu Ser Ser Leu Pro Ala Gly Ile
130         135         140
Phe Gly Gly Leu His Ser Leu Gln Tyr Leu Tyr Leu Gln Asp Asn His
145         150         155         160
Ile Glu Tyr Leu Gln Asp Asp Ile Phe Val Asp Leu Val Asn Leu Ser
165         170         175
His Leu Phe Leu His Gly Asn Lys Leu Trp Ser Leu Gly Gln Gly Ile
180         185         190
Phe Arg Gly Leu Val Asn Leu Asp Arg Leu Leu Leu His Glu Asn Gln
195         200         205

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9/23

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Leu Gln Trp Val His His Lys Ala Phe His Asp Leu His Arg Leu Thr
 210          215          220
Thr Leu Phe Leu Phe Asn Ser Leu Thr Glu Leu Gln Gly Asp Cys
225          230          235          240
Leu Ala Pro Leu Val Ala Leu Glu Phe Leu Arg Leu Asn Gly Asn Ala
          245          250          255
Trp Asp Cys Gly Cys Arg Ala Arg Ser Leu Trp Glu Trp Leu Arg Arg
          260          265          270
Phe Arg Gly Ser Ser Ser Val Val Pro Cys Ala Thr Pro Glu Leu Arg
          275          280          285
Gln Gly Gln Asp Leu Lys Ser Leu Arg Val Glu Asp Phe Arg Asn Cys
          290          295          300
Thr Gly Pro Ala Ser Pro His Gln Ile Lys Ser His Thr Leu Ser Thr
305          310          315          320
Ser Asp Arg Ala Ala Arg Lys Glu His His Pro Ser His Gly Ala Ser
          325          330          335
Arg Asp Lys Gly His Pro His Gly His Leu Pro Gly Ser Arg Ser Gly
          340          345          350
Ser Lys Lys Pro Gly Lys Asn Cys Thr Ser His Arg Asn Arg Asn Gln
          355          360          365
Ile Ser Lys Gly Ser Ala Gly Lys Glu Leu Pro Glu Leu Gln Asp Tyr
          370          375          380
Ala Pro Asp Tyr Gln His Lys Phe Ser Phe Asp Ile Met Pro Thr Ala
385          390          395          400
Arg Pro Lys Arg Lys Gly Lys Cys Ala Arg Arg Thr Pro Ile Arg Ala
          405          410          415
Pro Ser Gly Val Gln Gln Ala Ser Ser Gly Thr Ala Leu Gly Val Ser
          420          425          430
Leu Leu Ala Trp Ile Leu Gly Leu Val Val Ser Leu Arg
          435          440          445

```

&lt;210&gt; 10

&lt;211&gt; 473

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:/Note =  
Synthetic Construct

&lt;400&gt; 10

```

Met Ala Ala Trp Pro Ser Arg Val Gly Ala Trp Arg Pro Gly Ala Gly
 1          5          10          15
Pro Pro Thr Ser Ala Arg Leu Pro Gly Arg Leu Gly Gln Leu Gly Pro
          20          25          30
Trp Lys Lys Val Gly Cys Cys Val Glu Leu Leu Leu Leu Val Ala
          35          40          45
Ala Glu Leu Pro Leu Gly Gly Gly Cys Pro Arg Asp Cys Val Cys Tyr
          50          55          60
Pro Ala Pro Met Thr Val Ser Cys Gln Ala His Asn Phe Ala Ala Ile
65          70          75          80
Pro Glu Gly Ile Pro Val Asp Ser Glu Arg Val Phe Leu Gln Asn Asn
          85          90          95
Arg Ile Gly Leu Leu Gln Pro Gly His Phe Ser Pro Ala Met Val Thr
          100          105          110
Leu Trp Ile Tyr Ser Asn Asn Ile Thr Tyr Ile His Pro Ser Thr Phe
          115          120          125
Glu Gly Phe Val His Leu Glu Glu Leu Asp Leu Gly Asp Asn Arg Gln
          130          135          140
Leu Arg Thr Leu Ala Pro Glu Thr Phe Gln Gly Leu Val Lys Leu His
145          150          155          160

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10/23

Ala	Leu	Tyr	Leu	Tyr	Lys	Cys	Gly	Leu	Ser	Ala	Leu	Pro	Ala	Gly	Val
			165						170					175	
Phe	Gly	Gly	Leu	His	Ser	Leu	Gln	Tyr	Leu	Tyr	Leu	Gln	Asp	Asn	His
			180					185					190		
Ile	Glu	Tyr	Leu	Gln	Asp	Asp	Ile	Phe	Val	Asp	Leu	Val	Asn	Leu	Ser
		195					200					205			
His	Leu	Phe	Leu	His	Gly	Asn	Lys	Leu	Trp	Ser	Leu	Gly	Pro	Gly	Thr
	210					215					220				
Phe	Arg	Gly	Leu	Val	Asn	Leu	Asp	Arg	Leu	Leu	Leu	His	Glu	Asn	Gln
225					230					235					240
Leu	Gln	Trp	Val	His	His	Lys	Ala	Phe	His	Asp	Leu	Arg	Arg	Leu	Thr
			245					250						255	
Thr	Leu	Phe	Leu	Phe	Asn	Asn	Ser	Leu	Ser	Glu	Leu	Gln	Gly	Glu	Cys
		260					265						270		
Leu	Ala	Pro	Leu	Gly	Ala	Leu	Glu	Phe	Leu	Arg	Leu	Asn	Gly	Asn	Pro
	275						280					285			
Trp	Asp	Cys	Gly	Cys	Arg	Ala	Arg	Ser	Leu	Trp	Glu	Trp	Leu	Gln	Arg
	290					295					300				
Phe	Arg	Gly	Ser	Ser	Ser	Ala	Val	Pro	Cys	Val	Ser	Pro	Gly	Leu	Arg
305					310					315					320
His	Gly	Gln	Asp	Leu	Lys	Leu	Leu	Arg	Ala	Glu	Asp	Phe	Arg	Asn	Cys
			325						330					335	
Thr	Gly	Pro	Ala	Ser	Pro	His	Gln	Ile	Lys	Ser	His	Thr	Leu	Thr	Thr
		340						345					350		
Thr	Asp	Arg	Ala	Ala	Arg	Lys	Glu	His	His	Ser	Pro	His	Gly	Pro	Thr
	355						360					365			
Arg	Ser	Lys	Gly	His	Pro	His	Gly	Pro	Arg	Pro	Gly	His	Arg	Lys	Pro
	370					375					380				
Gly	Lys	Asn	Cys	Thr	Asn	Pro	Arg	Asn	Arg	Asn	Gln	Ile	Ser	Lys	Ala
385					390					395					400
Gly	Ala	Gly	Lys	Gln	Ala	Pro	Glu	Leu	Pro	Asp	Tyr	Ala	Pro	Asp	Tyr
			405						410					415	
Gln	His	Lys	Phe	Ser	Phe	Asp	Ile	Met	Pro	Thr	Ala	Arg	Pro	Lys	Arg
		420						425					430		
Lys	Gly	Lys	Cys	Ala	Arg	Arg	Thr	Pro	Ile	Arg	Ala	Pro	Ser	Gly	Val
	435						440					445			
Gln	Gln	Ala	Ser	Ser	Ala	Ser	Ser	Leu	Gly	Ala	Ser	Leu	Leu	Ala	Trp
	450					455					460				
Thr	Leu	Gly	Leu	Ala	Val	Thr	Leu	Arg							
465					470										

&lt;210&gt; 11

&lt;211&gt; 474

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:/Note =  
Synthetic Construct

&lt;400&gt; 11

Met	Leu	Pro	Gly	Leu	Arg	Arg	Leu	Leu	Gln	Gly	Pro	Ala	Ser	Ala	Cys
1			5						10					15	
Leu	Leu	Leu	Thr	Leu	Leu	Ala	Leu	Pro	Pro	Val	Thr	Pro	Ser	Cys	Pro
			20					25					30		
Met	Leu	Cys	Thr	Cys	Tyr	Ser	Ser	Pro	Pro	Thr	Val	Ser	Cys	Gln	Ala
		35				40					45				
Asn	Asn	Phe	Ser	Ser	Val	Pro	Leu	Ser	Leu	Pro	Pro	Ser	Thr	Gln	Arg
	50					55				60					
Leu	Phe	Leu	Gln	Asn	Asn	Leu	Ile	Arg	Ser	Leu	Arg	Pro	Gly	Thr	Phe
65					70					75					80

11/23

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Gly Pro Asn Leu Leu Thr Leu Trp Leu Phe Ser Asn Asn Leu Ser Thr
      85                      90                      95
Ile Tyr Pro Gly Thr Phe Arg His Leu Gln Ala Leu Glu Glu Leu Asp
      100                    105                    110
Leu Gly Asp Asn Arg His Leu Arg Ser Leu Glu Pro Asp Thr Phe Gln
      115                    120                    125
Gly Leu Glu Arg Leu Gln Ser Leu His Leu Tyr Arg Cys Gln Leu Ser
      130                    135                    140
Ser Leu Pro Gly Asn Ile Phe Arg Gly Leu Val Ser Leu Gln Tyr Leu
      145                    150                    155
Tyr Leu Gln Glu Asn Ser Leu Leu His Leu Gln Asp Asp Leu Phe Ala
      165                    170                    175
Asp Leu Ala Asn Leu Ser His Leu Phe Leu His Gly Asn Arg Leu Arg
      180                    185                    190
Leu Leu Thr Glu His Val Phe Arg Gly Leu Gly Ser Leu Asp Arg Leu
      195                    200                    205
Leu Leu His Gly Asn Arg Leu Gln Gly Val His Arg Ala Ala Phe His
      210                    215                    220
Gly Leu Ser Arg Leu Thr Ile Leu Tyr Leu Phe Asn Asn Ser Leu Ala
      225                    230                    235
Ser Leu Pro Gly Glu Ala Leu Ala Asp Leu Pro Ala Leu Glu Phe Leu
      245                    250                    255
Arg Leu Asn Ala Asn Pro Trp Ala Cys Asp Cys Arg Ala Arg Pro Leu
      260                    265                    270
Trp Ala Trp Phe Gln Arg Ala Arg Val Ser Ser Ser Asp Val Thr Cys
      275                    280                    285
Ala Thr Pro Pro Glu Arg Gln Gly Arg Asp Leu Arg Thr Leu Arg Asp
      290                    295                    300
Thr Asp Phe Gln Ala Cys Pro Pro Pro Thr Ser Pro Phe Arg Pro Phe
      305                    310                    315
Gln Thr Asn Gln Leu Thr Asp Glu Glu Leu Leu Gly Leu Pro Lys Cys
      325                    330                    335
Cys Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly Arg
      340                    345                    350
Pro Ala Ser Ala Gly Asn Ala Leu Lys Gly Arg Val Pro Pro Gly Asp
      355                    360                    365
Thr Pro Pro Gly Asn Gly Ser Gly Pro Arg His Ile Asn Asp Ser Pro
      370                    375                    380
Phe Gly Thr Leu Pro Gly Ser Ala Glu Pro Pro Leu Thr Ala Leu Arg
      385                    390                    395
Pro Gly Gly Ser Glu Pro Pro Gly Leu Pro Thr Thr Gly Pro Arg Arg
      405                    410                    415
Arg Pro Gly Cys Ser Arg Lys Asn Arg Thr Arg Ser His Cys Arg Leu
      420                    425                    430
Gly Gln Ala Gly Ser Gly Ser Ser Gly Thr Gly Asp Ala Glu Gly Ser
      435                    440                    445
Gly Ala Leu Pro Ala Leu Ala Cys Ser Leu Ala Pro Leu Gly Leu Ala
      450                    455                    460
Leu Val Leu Trp Thr Val Leu Gly Pro Cys
      465                    470

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&lt;210&gt; 12

&lt;211&gt; 1425

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:/Note =  
Synthetic Construct

&lt;400&gt; 12

atgctgcccc	ggctccggcg	cctgctgcaa	ggctcctgcct	cagcctgcct	cctgctgaca	60
ctcctggccc	tccctcctgt	gacccccagc	tgccctatgc	tctgcacctg	ctactcctct	120
ccgcccacag	tgagctgcca	ggccaacaac	ttctcctcgg	tgccgctgtc	cttgccaccc	180
agtacacagc	gactcttctt	gcagaacaac	ctcattcgct	cactgcggcc	aggaactttt	240
gggcccaccc	tgctcacccct	gtggctcttc	tccaacaacc	tctccacccat	ctaccctggc	300
accttccgcc	atctgcaggc	cctagaggaa	ctggacctcg	gtgacaatcg	gcacctgcgc	360
tccctggagc	ctgacacctt	ccagggcctg	gagaggctgc	agtcactaca	tctgtaccgg	420
tgccagctca	gcagtctgcc	tggcaacatc	ttccgaggcc	tggtcagcct	acagtacctc	480
tacctccagg	agaacagcct	gctccacctc	caggatgact	tggtcgccga	cctggccaac	540
ctgagccacc	ttttcctcca	cgggaaccgc	ctgcggctgc	tcacggagca	cgtgttccgc	600
ggcttgggca	gcctggaccg	gctgctgctg	cacgggaacc	ggctgcaggg	cgtacaccgc	660
gcagccttcc	acgggtctcag	ccgcctcacc	atcctttacc	tggtcaacaa	cagcctggcc	720
tcgctgcccg	gagaggcgct	ggctgacctg	ccagcgctcg	agttcctgcg	gctcaacgcc	780
aaacccctggg	cgtgcgactg	ccgcgctcgg	ccgctctggg	cttggttcca	gcgcgcgcgg	840
gtgtccagct	ccgacgtgac	ctgcgccacc	ccgcccagc	gccagggccg	ggacctgcgc	900
acgctgcgcg	acaccgattt	ccaagcgctg	ccgccgcca	ctagtccctt	ccgtcccttc	960
cagaccaatc	agctcactga	tgaggagctg	ctgggcctcc	ccaagtgctg	ccagccggat	1020
gctgcagaca	aggcctcagt	actggaaccc	gggaggccgg	cgtctgctgg	aaatgcactc	1080
aagggacgtg	tgccctcccg	tgacactcca	ccaggcaatg	gctcaggccc	acggcacatc	1140
aatgactctc	catttgggac	tttgccgggg	tctgcagagc	ccccactgac	tgccctgcgg	1200
cctgggggtt	ccgagccccc	gggactgccc	accacgggtc	cccgcaggag	gccaggttgt	1260
tcagaaaaga	accgcacccg	tagccactgc	cgtctggggc	aggcaggaag	tgggagcagt	1320
ggaactgggg	atgcagaagg	ttcggggggc	ctgcctgccc	tggcctgcag	ccttgctcct	1380
ctgggccttg	cactggtact	ttggaccgtg	ctcgggcctt	gctga		1425

&lt;210&gt; 13

&lt;211&gt; 420

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:/Note =  
Synthetic Construct

&lt;400&gt; 13

Met	Lys	Arg	Ala	Ser	Ser	Gly	Gly	Ser	Arg	Leu	Leu	Ala	Trp	Val	Leu
1				5					10					15	
Trp	Leu	Gln	Ala	Trp	Arg	Val	Ala	Thr	Pro	Cys	Pro	Gly	Ala	Cys	Val
			20					25					30		
Cys	Tyr	Asn	Glu	Pro	Lys	Val	Thr	Thr	Ser	Cys	Pro	Gln	Gln	Gly	Leu
		35					40					45			
Gln	Ala	Val	Pro	Thr	Gly	Ile	Pro	Ala	Ser	Ser	Gln	Arg	Ile	Phe	Leu
		50				55					60				
His	Gly	Asn	Arg	Ile	Ser	Tyr	Val	Pro	Ala	Ala	Ser	Phe	Gln	Ser	Cys
65					70					75				80	
Arg	Asn	Leu	Thr	Ile	Leu	Trp	Leu	His	Ser	Asn	Ala	Leu	Ala	Gly	Ile
			85					90						95	
Asp	Ala	Ala	Ala	Phe	Thr	Gly	Leu	Thr	Leu	Leu	Glu	Gln	Leu	Asp	Leu
			100					105					110		
Ser	Asp	Asn	Ala	Gln	Leu	Arg	Val	Val	Asp	Pro	Thr	Thr	Phe	Arg	Gly
		115					120					125			
Leu	Gly	His	Leu	His	Thr	Leu	His	Leu	Asp	Arg	Cys	Gly	Leu	Gln	Glu
		130				135					140				
Leu	Gly	Pro	Gly	Leu	Phe	Arg	Gly	Leu	Ala	Ala	Leu	Gln	Tyr	Leu	Tyr
145					150					155					160
Leu	Gln	Asp	Asn	Asn	Leu	Gln	Ala	Leu	Pro	Asp	Asn	Thr	Phe	Arg	Asp
			165					170						175	
Leu	Gly	Asn	Leu	Thr	His	Leu	Phe	Leu	His	Gly	Asn	Arg	Ile	Pro	Ser

180

185

190

Val Pro Glu His Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu  
 195 200 205  
 Leu His Gln Asn His Val Ala Arg Val His Pro His Ala Phe Arg Asp  
 210 215 220  
 Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Met  
 225 230 235 240  
 Leu Pro Ala Glu Val Leu Val Pro Leu Arg Ser Leu Gln Tyr Leu Arg  
 245 250 255  
 Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp  
 260 265 270  
 Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro Cys Asn  
 275 280 285  
 Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala Ala Ser  
 290 295 300  
 Asp Leu Glu Gly Cys Ala Val Ala Thr Ser Pro Thr Arg Pro Gly Ser  
 305 310 315 320  
 Arg Ala Arg Gly Asn Ser Ser Ser Asn His Leu Tyr Gly Val Ala Glu  
 325 330 335  
 Ala Gly Ala Pro Pro Ala Asp Pro Ser Thr Leu Tyr Arg Asp Leu Pro  
 340 345 350  
 Ala Glu Asp Ser Arg Gly Arg Gln Gly Gly Asp Ala Pro Thr Glu Asp  
 355 360 365  
 Asp Tyr Trp Gly Gly Tyr Gly Gly Glu Asp Gln Arg Gly Glu Gln Thr  
 370 375 380  
 Cys Pro Gly Ala Ala Cys Gln Ala Pro Ala Asp Ser Arg Gly Pro Val  
 385 390 395 400  
 Leu Ser Ala Gly Leu Arg Thr Pro Leu Leu Cys Leu Leu Leu Leu Ala  
 405 410 415  
 Pro His His Leu  
 420

&lt;210&gt; 14

&lt;211&gt; 1263

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

 <223> Description of Artificial Sequence:/Note =  
 Synthetic Construct

&lt;400&gt; 14

atgaagaggg	cgctcctccgg	aggaagccgg	ctgctggcat	gggtggtatg	gctacaggcc	60
tggagggtag	caacgccctg	ccctggtgcc	tgtgtgtgct	acaatgagcc	caaggtcaca	120
acaagctgcc	cccagcaggg	cctgcaggct	gtacccactg	gcatcccagc	ctccagccag	180
agaatcttcc	tgcacggcaa	ccgaatctct	tacgtgccag	ccgccagctt	ccagtcatgc	240
cggaatctca	ccatcctgtg	gctgcactca	aatgcgctgg	ccgggattga	tgccgcggcc	300
ttcactggtc	tgaccctcct	ggagcaacta	gatcttagtg	acaatgcaca	gctccgtgtc	360
gtggacccca	ccacgttccg	tggcctgggc	cacctgcaca	cgctgcacct	agaccgatgc	420
ggcctgcagg	agctggggcc	tggcctattc	cgtgggctgg	cagctctgca	gtacctctac	480
ctacaagaca	acaacctgca	ggcacttccc	gacaacacct	tccgagacct	gggcaacctc	540
acgcatctct	ttctgcatgg	caaccgtatc	cccagtgttc	ctgagcacgc	tttccgtggc	600
ttgcacagtc	ttgaccgtct	cctcttgcac	cagaaccatg	tggctcgtgt	gcacccacat	660
gccttccggg	accttggccg	actcatgacc	ctctacctgt	ttgccaaaca	cctctccatg	720
ctccccgcag	aggctcctagt	gcccctgagg	tctctgcagt	acctgcgact	caatgacaac	780
ccctgggtgt	gtgactgcag	ggcacgtccg	ctctgggcct	ggctgcagaa	gttccgaggt	840
tctcatcccg	agggtccctg	caacctaccc	caacgcctgg	caggccgtga	tctgaagcgc	900
ctgctgcca	gtgacttaga	gggttgtgct	gtggctacta	gtcccacgcg	gccgggcagc	960
cgcgcccgcg	gcaacagctc	ttccaaccac	ctgtacggcg	tggccgaggc	gggcgctccc	1020
cccgagagcc	catccacgct	ctaccgagac	ctgcccgcgc	aggactcgcg	ggggcgctcag	1080
ggcggggacg	cgcccactga	ggacgactac	tgggggggct	acggcggcga	ggaccagcga	1140
ggcgagcaga	cgtgtcccgg	ggccgcgtgc	caggcgcccg	cggactcgcg	tggccccgtg	1200

ctctcggccg ggctgcgcac ccctctgctc tgctctcttgc tcttggtccc ccatacacctc 1260  
tga 1263

<210> 15  
<211> 415  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:/Note =  
Synthetic Construct

<400> 15  
Met Leu Arg Lys Gly Cys Cys Val Glu Leu Leu Leu Leu Leu Leu Ala  
1 5 10 15  
Gly Glu Leu Pro Leu Ser Gly Gly Cys Pro Arg Asp Cys Val Cys Tyr  
20 25 30  
Pro Ser Pro Met Thr Val Ser Cys Gln Ala His Asn Phe Leu Gln Asn Asn  
35 40 45  
Pro Glu Gly Ile Pro Glu Asp Ser Glu Arg Ile Phe Leu Gln Asn Asn  
50 55 60  
His Ile Thr Phe Leu Gln Gln Gly His Phe Ser Pro Ala Met Val Thr  
65 70 75 80  
Leu Trp Ile Tyr Ser Asn Asn Ile Thr Phe Ile Ala Pro Asn Thr Phe  
85 90 95  
Glu Gly Phe Val His Leu Glu Glu Leu Asp Leu Gly Asp Asn Arg Gln  
100 105 110  
Leu Arg Thr Leu Ala Pro Glu Thr Phe Gln Gly Leu Val Lys Leu His  
115 120 125  
Ala Leu Tyr Leu Tyr Lys Cys Gly Leu Ser Ser Leu Pro Ala Gly Ile  
130 135 140  
Phe Gly Gly Leu His Ser Leu Gln Tyr Leu Tyr Leu Gln Asp Asn His  
145 150 155 160  
Ile Glu Tyr Leu Gln Asp Asp Ile Phe Val Asp Leu Val Asn Leu Ser  
165 170 175  
His Leu Phe Leu His Gly Asn Lys Leu Trp Ser Leu Gly Gln Gly Ile  
180 185 190  
Phe Arg Gly Leu Val Asn Leu Asp Arg Leu Leu Leu His Glu Asn Gln  
195 200 205  
Leu Gln Trp Val His His Lys Ala Phe His Asp Leu His Arg Leu Thr  
210 215 220  
Thr Leu Phe Leu Phe Asn Asn Ser Leu Thr Glu Leu Gln Gly Asp Cys  
225 230 235 240  
Leu Ala Pro Leu Val Ala Leu Glu Phe Leu Arg Leu Asn Gly Asn Ala  
245 250 255  
Trp Asp Cys Gly Cys Arg Ala Arg Ser Leu Trp Glu Trp Leu Arg Arg  
260 265 270  
Phe Arg Gly Ser Ser Ser Val Val Pro Cys Ala Thr Pro Glu Leu Arg  
275 280 285  
Gln Gly Gln Asp Leu Lys Ser Leu Arg Val Glu Asp Phe Arg Asn Cys  
290 295 300  
Thr Gly Pro Thr Ser Pro Thr Arg Pro Gly Ser Arg Ala Arg Gly Asn  
305 310 315 320  
Ser Ser Ser Asn His Leu Tyr Gly Val Ala Glu Ala Gly Ala Pro Pro  
325 330 335  
Ala Asp Pro Ser Thr Leu Tyr Arg Asp Leu Pro Ala Glu Asp Ser Arg  
340 345 350  
Gly Arg Gln Gly Gly Asp Ala Pro Thr Glu Asp Asp Tyr Trp Gly Gly  
355 360 365  
Tyr Gly Gly Glu Asp Gln Arg Gly Glu Gln Thr Cys Pro Gly Ala Ala  
370 375 380

Cys Gln Ala Pro Ala Asp Ser Arg Gly Pro Val Leu Ser Ala Gly Leu  
 385 390 395 400  
 Arg Thr Pro Leu Leu Cys Leu Leu Leu Leu Ala Pro His His Leu  
 405 410 415

<210> 16  
 <211> 1245  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:/Note =  
 Synthetic Construct

<400> 16  
 atgcttcgca aagggtgctg tgtggaattg ctgctgttgc tgctggctgg agagctacct 60  
 ctgagtgggtg gttgtcctcg ctgtgtgtgc taccctcgc ccatgactgt cagttgccag 120  
 gcacacaact ttgccgccat ccccaggggc atcccagagg acagcgagcg catcttctcg 180  
 cagaacaatc acatcacctt cctccagcag ggccacttca gcccgccat ggtcacccctc 240  
 tggatctact ccaacaacat cactttcatt gctcccaaca ctttgaggg ctttgtgcat 300  
 ctggaggagc tagaccttgg agacaaccgg cagcttcgaa cgctggcacc cgagaccttc 360  
 caaggcctgg tgaagcttca cgccctctac ctctacaagt gcggactgag ctccctgcct 420  
 gcgggcatct ttggtggcct gcacagcctg cagtacctct acttgcagga caaccatatt 480  
 gagtacctcc aagatgacat ctttgtggac ctgggtcaacc tcagtcactt gtttctccat 540  
 ggcaacaagc tatggagcct gggccagggc atcttccggg gcctggtgaa cctggaccgg 600  
 ttgctgctgc atgagaacca gctacagtgg gtccaccaca aggcctttcca tgacctccac 660  
 aggctaacca ccctctttct cttcaacaat agcctcaccg agctgcaggg tgactgcctg 720  
 gcccccttgg tggccctgga gtttcttctc ctcaatggga atgcttggga ctgtggctgc 780  
 cgggcacggt ccctgtggga atggctgcga aggttccgtg gctccagctc tgttgtcccc 840  
 tcgcgcgactc cagagctgcg gcaaggacag gacctgaagt cgctgagggt tgaggacttc 900  
 cggaactgca ctggaccaac tagtccacg cgggcgggca gccgcgcccg cggcaacagc 960  
 tcttccaacc acctgtacgg cgtggccgag gcgggcgctc cccccgcaga cccatccacg 1020  
 ctctaccgag acctgcccgc cgaggactcg cggggcgctc agggcgggga cgcgcccact 1080  
 gaggacgact actggggggg ctacggcggc gaggaccagc gaggcgagca gacgtgtccc 1140  
 ggggcccgcg gccaggcgcc cgcggactcg cgtggccccg tgctctcggc cgggctgcgc 1200  
 acccctctgc tctgcctctt gctcctggct ccccatcacc tctga 1245

<210> 17  
 <211> 452  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:/Note =  
 Synthetic Construct

<400> 17  
 Met Leu Pro Gly Leu Arg Arg Leu Leu Gln Gly Pro Ala Ser Ala Cys  
 1 5 10 15  
 Leu Leu Leu Thr Leu Leu Ala Leu Pro Pro Val Thr Pro Ser Cys Pro  
 20 25 30  
 Met Leu Cys Thr Cys Tyr Ser Ser Pro Pro Thr Val Ser Cys Gln Ala  
 35 40 45  
 Asn Asn Phe Ser Ser Val Pro Leu Ser Leu Pro Pro Ser Thr Gln Arg  
 50 55 60  
 Leu Phe Leu Gln Asn Asn Leu Ile Arg Ser Leu Arg Pro Gly Thr Phe  
 65 70 75 80  
 Gly Pro Asn Leu Leu Thr Leu Trp Leu Phe Ser Asn Asn Leu Ser Thr  
 85 90 95  
 Ile Tyr Pro Gly Thr Phe Arg His Leu Gln Ala Leu Glu Glu Leu Asp  
 100 105 110

Leu Gly Asp Asn Arg His Leu Arg Ser Leu Glu Pro Asp Thr Phe Gln  
 115 120 125  
 Gly Leu Glu Arg Leu Gln Ser Leu His Leu Tyr Arg Cys Gln Leu Ser  
 130 135 140  
 Ser Leu Pro Gly Asn Ile Phe Arg Gly Leu Val Ser Leu Gln Tyr Leu  
 145 150 155 160  
 Tyr Leu Gln Glu Asn Ser Leu Leu His Leu Gln Asp Asp Leu Phe Ala  
 165 170 175  
 Asp Leu Ala Asn Leu Ser His Leu Phe Leu His Gly Asn Arg Leu Arg  
 180 185 190  
 Leu Leu Thr Glu His Val Phe Arg Gly Leu Gly Ser Leu Asp Arg Leu  
 195 200 205  
 Leu Leu His Gly Asn Arg Leu Gln Gly Val His Arg Ala Ala Phe His  
 210 215 220  
 Gly Leu Ser Arg Leu Thr Ile Leu Tyr Leu Phe Asn Asn Ser Leu Ala  
 225 230 235 240  
 Ser Leu Pro Gly Glu Ala Leu Ala Asp Leu Pro Ala Leu Glu Phe Leu  
 245 250 255  
 Arg Leu Asn Ala Asn Pro Trp Ala Cys Asp Cys Arg Ala Arg Pro Leu  
 260 265 270  
 Trp Ala Trp Phe Gln Arg Ala Arg Val Ser Ser Ser Asp Val Thr Cys  
 275 280 285  
 Ala Thr Pro Pro Glu Arg Gln Gly Arg Asp Leu Arg Thr Leu Arg Asp  
 290 295 300  
 Thr Asp Phe Gln Ala Cys Pro Pro Pro Thr Pro Thr Arg Pro Gly Ser  
 305 310 315 320  
 Arg Ala Arg Gly Asn Thr Ser Pro Gly Arg Pro Ala Ser Ala Gly Asn  
 325 330 335  
 Ala Leu Lys Gly Arg Val Pro Pro Gly Asp Thr Pro Pro Gly Asn Gly  
 340 345 350  
 Ser Gly Pro Arg His Ile Asn Asp Ser Pro Phe Gly Thr Leu Pro Gly  
 355 360 365  
 Ser Ala Glu Pro Pro Leu Thr Ala Leu Arg Pro Gly Gly Ser Glu Pro  
 370 375 380  
 Pro Gly Leu Pro Thr Thr Gly Pro Arg Arg Arg Pro Gly Cys Ser Arg  
 385 390 395 400  
 Lys Asn Arg Thr Arg Ser His Cys Arg Leu Gly Gln Ala Gly Ser Gly  
 405 410 415  
 Ser Ser Gly Thr Gly Asp Ala Glu Gly Ser Gly Ala Leu Pro Ala Leu  
 420 425 430  
 Ala Cys Ser Leu Ala Pro Leu Gly Leu Ala Leu Val Leu Trp Thr Val  
 435 440 445  
 Leu Gly Pro Cys  
 450

&lt;210&gt; 18

&lt;211&gt; 1359

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

 <223> Description of Artificial Sequence:/Note =  
 Synthetic Construct

&lt;400&gt; 18

atgctgcccg	ggctccggcg	cctgctgcaa	ggctcctgcct	cagcctgcct	cctgctgaca	60
ctcctggccc	tccctcctgt	gacccccagc	tgccctatgc	tctgcacctg	ctactcctct	120
ccgcccacag	tgagctgcca	ggccaacaac	ttctcctcgg	tgccgctgtc	cttgccaccc	180
agtacacagc	gactcttctt	gcagaacaac	ctcattcgct	cactgcggcc	aggaactttt	240
gggcccaccc	tgctcaccct	gtggctcttc	tccaacaacc	tctccaccat	ctaccctggc	300
accttcgcc	atctgcaggc	cctagaggaa	ctggacctcg	gtgacaatcg	gcacctgcgc	360



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tccctggagc ctgacacctt ccagggcctg gagaggctgc agtcactaca tctgtaccgg      420
tgccagctca gcagtctgcc tggcaacatc ttccgaggcc tggtcagcct acagtacctc      480
tacctccagg agaacagcct gctccaccta caggatgact tggtcgccga cctggccaac      540
ctgagccacc ttttctcca cggaaccgc ctgcggctgc tcacggagca cgtgttccgc      600
ggcttgggca gcctggaccg gctgctgctg caccggaacc ggctgcaggg cgtacaccgc      660
gcagccttcc acggtctcag ccgcctcacc atcctttacc tgttcaacaa cagcctggcc      720
tcgctgccgg gagaggcgct ggctgacctg ccagcgctcg agttcctgcg gctcaacgcc      780
aacccttggg cgtgcgactg ccgcgctcgg ccgctctggg cttggttcca gcgcgcgcgg      840
gtgtccagct ccgacgtgac ctgcgccacc ccgcccagag gccagggccg ggacctgcgc      900
acgctgcgcg acaccgattt ccaagcgtgc ccgcgcacca caccacgcg gccgggcagc      960
cgcgcccgcg gcaacactag tcccgggagg ccggcgctcg ctggaaatgc actcaaggga    1020
cgtgtgcctc ccggtgacac tccaccaggc aatggctcag gccacggca catcaatgac    1080
tctccatttg ggactttgcc gggctctgca gagccccac tgactgcctt gcggcctggg    1140
ggttccgagc ccccgggact gccaccacg ggtcccgcga ggaggccagg ttgttccaga    1200
aagaaccgca cccgtagcca ctgccgtctg ggccaggcag gaagtgggag cagtgggaact    1260
ggggatgcag aagggtcggg ggccctgcct gccctggcct gcagccttgc tcctctgggc    1320
cttgcaactgg tactttggac cgtgctcggg ccctgctga      1359

```

&lt;210&gt; 19

&lt;211&gt; 441

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:/Note =  
Synthetic Construct

&lt;400&gt; 19

```

Met Lys Arg Ala Ser Ser Gly Gly Ser Arg Leu Leu Ala Trp Val Leu
 1              5              10              15
Trp Leu Gln Ala Trp Arg Val Ala Thr Pro Cys Pro Gly Ala Cys Val
              20              25              30
Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Cys Pro Gln Gln Gly Leu
              35              40              45
Gln Ala Val Pro Thr Gly Ile Pro Ala Ser Ser Gln Arg Ile Phe Leu
 50              55              60
His Gly Asn Arg Ile Ser Tyr Val Pro Ala Ala Ser Phe Gln Ser Cys
65              70              75              80
Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Ala Leu Ala Gly Ile
              85              90              95
Asp Ala Ala Ala Phe Thr Gly Leu Thr Leu Leu Glu Gln Leu Asp Leu
              100              105              110
Ser Asp Asn Ala Gln Leu Arg Val Val Asp Pro Thr Thr Phe Arg Gly
              115              120              125
Leu Gly His Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Gln Glu
130              135              140
Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr
145              150              155              160
Leu Gln Asp Asn Asn Leu Gln Ala Leu Pro Asp Asn Thr Phe Arg Asp
              165              170              175
Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Pro Ser
              180              185              190
Val Pro Glu His Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu
              195              200              205
Leu His Gln Asn His Val Ala Arg Val His Pro His Ala Phe Arg Asp
210              215              220
Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Met
225              230              235              240
Leu Pro Ala Glu Val Leu Val Pro Leu Arg Ser Leu Gln Tyr Leu Arg
              245              250              255

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```

Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp
      260      265      270
Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro Cys Asn
      275      280      285
Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala Ala Ser
      290      295      300
Asp Leu Glu Gly Cys Ala Val Ala Ser Gly Pro Phe Arg Pro Phe Gln
      305      310      315      320
Thr Asn Gln Leu Thr Asp Glu Glu Leu Leu Gly Leu Pro Lys Cys Cys
      325      330      335
Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Thr Ser Ser Asn His Leu
      340      345      350
Tyr Gly Val Ala Glu Ala Gly Ala Pro Pro Ala Asp Pro Ser Thr Leu
      355      360      365
Tyr Arg Asp Leu Pro Ala Glu Asp Ser Arg Gly Arg Gln Gly Gly Asp
      370      375      380
Ala Pro Thr Glu Asp Asp Tyr Trp Gly Gly Tyr Gly Gly Glu Asp Gln
      385      390      395      400
Arg Gly Glu Gln Thr Cys Pro Gly Ala Ala Cys Gln Ala Pro Ala Asp
      405      410      415
Ser Arg Gly Pro Val Leu Ser Ala Gly Leu Arg Thr Pro Leu Leu Cys
      420      425      430
Leu Leu Leu Leu Ala Pro His His Leu
      435      440

```

&lt;210&gt; 20

&lt;211&gt; 1326

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:/Note =  
Synthetic Construct

&lt;400&gt; 20

```

atgaagaggg cgctcctccg aggaagcccg ctgctggcat ggggtgttatg gctacaggcc      60
tggaagggtag caacgccctg ccttggtgcc tgtgtgtgct acaatgagcc caagggtcaca      120
acaagctgcc cccagcaggg cctgcaggct gtaccactg gcattcccagc ctccagccag      180
agaatcttcc tgcacggcaa ccgaatctct tacgtgccag ccgccagctt ccagtcatgc      240
cggaatctca ccactctgtg gctgcaactc aatgcgctgg ccgggattga tgccgcggcc      300
ttcactgggtc tgaccctcct ggagcaacta gatcttagtg acaatgcaca gctccgtgtc      360
gtggacccca ccacgttccg tggcctgggc cacctgcaca cgctgcacct agaccgatgc      420
ggcctgcagg agctggggcc tggcctattc cgtgggctgg cagctctgca gtacctctac      480
ctacaagaca acaacctgca ggcacttccc gacaacacct tccgagacct gggcaacctc      540
acgcatctct ttctgcatgg caaccgtatc cccagtgttc ctgagcacgc tttccgtggc      600
ttgcacagtc ttgaccgtct cctcttgacc cagaacctat tggctcgtgt gcacccacat      660
gccttccggg accttgggcg actcatgacc ctctacctgt ttgccaacaa cctctccatg      720
ctcccgcag aggtcctagt gcccctgagg tctctgcagt acctgcgact caatgacaac      780
ccttgggtgt gtgactgcag ggcacgtccg ctctgggcct ggctgcagaa gttccgaggt      840
tcctcatccg aggtgccctg caacctaccc caacgcctgg caggccgtga tctgaagcgc      900
ctggctgcca gtgacttaga gggttgtgct gtggcttcgg ggcccttccg tcccttccag      960
accaatcagc tcaactgatga ggagctgctg ggcctcccca agtgcctgcca gccggatgct      1020
gcagacaagg cctcagtaac tagttccaac cacctgtacg gcgtggccga ggcggggcgt      1080
ccccccgcag acccatccac gctctaccga gacctgcccg ccgaggactc gcgggggcgt      1140
cagggcgggg acgcgcccac tgaggacgac tactgggggg gctacggcgg cgaggaccag      1200
cgaggcgagc agacgtgtcc cggggccgcg tgccaggcgc ccgaggactc gcgtggcccc      1260
gtgctctcgg ccgggctgcg caccctctct ctctgcctct tgcctcctggc tccccatcac      1320
ctctga

```

&lt;210&gt; 21

&lt;211&gt; 452

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:/Note =  
Synthetic Construct

&lt;400&gt; 21

Met	Lys	Arg	Ala	Ser	Ser	Gly	Gly	Ser	Arg	Leu	Leu	Ala	Trp	Val	Leu	1	5	10	15
Trp	Leu	Gln	Ala	Trp	Arg	Val	Ala	Thr	Pro	Cys	Pro	Gly	Ala	Cys	Val	20	25	30	
Cys	Tyr	Asn	Glu	Pro	Lys	Val	Thr	Thr	Ser	Cys	Pro	Gln	Gln	Gly	Leu	35	40	45	
Gln	Ala	Val	Pro	Thr	Gly	Ile	Pro	Ala	Ser	Ser	Gln	Arg	Ile	Phe	Leu	50	55	60	
His	Gly	Asn	Arg	Ile	Ser	Tyr	Val	Pro	Ala	Ala	Ser	Phe	Gln	Ser	Cys	65	70	75	80
Arg	Asn	Leu	Thr	Ile	Leu	Trp	Leu	His	Ser	Asn	Ala	Leu	Ala	Gly	Ile	85	90	95	
Asp	Ala	Ala	Ala	Phe	Thr	Gly	Leu	Thr	Leu	Leu	Glu	Gln	Leu	Asp	Leu	100	105	110	
Ser	Asp	Asn	Ala	Gln	Leu	Arg	Val	Val	Asp	Pro	Thr	Thr	Phe	Arg	Gly	115	120	125	
Leu	Gly	His	Leu	His	Thr	Leu	His	Leu	Asp	Arg	Cys	Gly	Leu	Gln	Glu	130	135	140	
Leu	Gly	Pro	Gly	Leu	Phe	Arg	Gly	Leu	Ala	Ala	Leu	Gln	Tyr	Leu	Tyr	145	150	155	160
Leu	Gln	Asp	Asn	Asn	Leu	Gln	Ala	Leu	Pro	Asp	Asn	Thr	Phe	Arg	Asp	165	170	175	
Leu	Gly	Asn	Leu	Thr	His	Leu	Phe	Leu	His	Gly	Asn	Arg	Ile	Pro	Ser	180	185	190	
Val	Pro	Glu	His	Ala	Phe	Arg	Gly	Leu	His	Ser	Leu	Asp	Arg	Leu	Leu	195	200	205	
Leu	His	Gln	Asn	His	Val	Ala	Arg	Val	His	Pro	His	Ala	Phe	Arg	Asp	210	215	220	
Leu	Gly	Arg	Leu	Met	Thr	Leu	Tyr	Leu	Phe	Ala	Asn	Asn	Leu	Ser	Met	225	230	235	240
Leu	Pro	Ala	Glu	Val	Leu	Val	Pro	Leu	Arg	Ser	Leu	Gln	Tyr	Leu	Arg	245	250	255	
Leu	Asn	Asp	Asn	Pro	Trp	Val	Cys	Asp	Cys	Arg	Ala	Arg	Pro	Leu	Trp	260	265	270	
Ala	Trp	Leu	Gln	Lys	Phe	Arg	Gly	Ser	Ser	Ser	Glu	Val	Pro	Cys	Asn	275	280	285	
Leu	Pro	Gln	Arg	Leu	Ala	Gly	Arg	Asp	Leu	Lys	Arg	Leu	Ala	Ala	Ser	290	295	300	
Asp	Leu	Glu	Gly	Cys	Ala	Val	Ala	Thr	Ser	Pro	Thr	Arg	Pro	Gly	Ser	305	310	315	320
Arg	Ala	Arg	Gly	Asn	Thr	Ser	Pro	Gly	Arg	Pro	Ala	Ser	Ala	Gly	Asn	325	330	335	
Ala	Leu	Lys	Gly	Arg	Val	Pro	Pro	Gly	Asp	Thr	Pro	Pro	Gly	Asn	Gly	340	345	350	
Ser	Gly	Pro	Arg	His	Ile	Asn	Asp	Ser	Pro	Phe	Gly	Thr	Leu	Pro	Gly	355	360	365	
Ser	Ala	Glu	Pro	Pro	Leu	Thr	Ala	Leu	Arg	Pro	Gly	Gly	Ser	Glu	Pro	370	375	380	
Pro	Gly	Leu	Pro	Thr	Thr	Gly	Pro	Arg	Arg	Arg	Pro	Gly	Cys	Ser	Arg	385	390	395	400
Lys	Asn	Arg	Thr	Arg	Ser	His	Cys	Arg	Leu	Gly	Gln	Ala	Gly	Ser	Gly	405	410	415	

Ser Ser Gly Thr Gly Asp Ala Glu Gly Ser Gly Ala Leu Pro Ala Leu  
                   420                  425                  430  
 Ala Cys Ser Leu Ala Pro Leu Gly Leu Ala Leu Val Leu Trp Thr Val  
                   435                  440                  445  
 Leu Gly Pro Cys  
                   450

&lt;210&gt; 22

&lt;211&gt; 1359

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:/Note =  
 Synthetic Construct

&lt;400&gt; 22

atgaagaggg	cgctcctccg	aggaagccgg	ctgctggcat	gggtgttatg	gctacaggcc	60
tggagggtag	caacgccctg	ccctgggtgcc	tgtgtgtgct	acaatgagcc	caaggtcaca	120
acaagctgcc	cccagcaggg	cctgcagggt	gtaccactg	gcatcccagc	ctccagccag	180
agaatcttcc	tgcacggcaa	ccgaatctct	tacgtgccag	ccgccagctt	ccagtcatgc	240
cggaaatctca	ccatcctgtg	gctgcactca	aatgcgctgg	ccgggattga	tgccgcggcc	300
ttcactggtc	tgacctctct	ggagcaacta	gatcttagtg	acaatgcaca	gctccgtgtc	360
gtggacccca	ccacgttccg	tggcctgggc	cacctgcaca	cgctgcacct	agaccgatgc	420
ggcctgcagg	agctggggcc	tggcctattc	cgtgggctgg	cagctctgca	gtacctctac	480
ctacaagaca	acaacctgca	ggcacttccc	gacaacacct	tccgagacct	gggcaacctc	540
acgcatctct	ttctgcatgg	caaccgtatc	cccagtgttc	ctgagcacgc	tttccgtggc	600
ttgcacagtc	ttgaccgtct	cctcttgac	cagaaccatg	tggctcgtgt	gcacccacat	660
gccttccggg	accttggccg	actcatgacc	ctctacctgt	ttgccaacaa	cctctccatg	720
ctccccgcag	aggtcctagt	gcccctgagg	tctctgcagt	acctgcgact	caatgacaac	780
ccctgggtgt	gtgactgcag	ggcacgtccg	ctctgggcct	ggctgcagaa	gttccgaggt	840
tcctcatccg	aggtgccctg	caacctaccc	caacgcctgg	caggccgtga	tctgaagcgc	900
ctggctgcca	gtgacttaga	gggttgtgct	gtggctacta	gacccacgcg	gccggggcagc	960
cgcgcccgcg	gcaacactag	tcccgggagg	ccggcgtctg	ctggaaatgc	actcaagggga	1020
cgtgtgcctc	ccggtgacac	tccaccaggc	aatggctcag	gcccacggca	catcaatgac	1080
tctccatttg	ggactttgcc	gggctctgca	gagcccccac	tgactgccct	gcggcctggg	1140
ggttccgagc	ccccgggact	gcccaccacg	ggtccccgca	ggaggccagg	ttgttccaga	1200
aagaaccgca	cccgtagcca	ctgccgtctg	ggccaggcag	gaagtgggag	cagtgggaact	1260
ggggatgcag	aaggttcggg	ggccctgcct	gccctggcct	gcagccttgc	tcctctgggc	1320
cttgactgg	tactttggac	cgtgctcggg	ccctgctga			1359

&lt;210&gt; 23

&lt;211&gt; 452

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:/Note =  
 Synthetic Construct

&lt;400&gt; 23

Met	Leu	Pro	Gly	Leu	Arg	Arg	Leu	Leu	Gln	Gly	Pro	Ala	Ser	Ala	Cys
1				5				10						15	
Leu	Leu	Leu	Thr	Leu	Leu	Ala	Leu	Pro	Pro	Val	Thr	Pro	Ser	Cys	Pro
			20					25					30		
Met	Leu	Cys	Thr	Cys	Tyr	Ser	Ser	Pro	Pro	Thr	Val	Ser	Cys	Gln	Ala
		35					40					45			
Asn	Asn	Phe	Ser	Ser	Val	Pro	Leu	Ser	Leu	Pro	Pro	Ser	Thr	Gln	Arg
	50					55				60					
Leu	Phe	Leu	Gln	Asn	Asn	Leu	Ile	Arg	Ser	Leu	Arg	Pro	Gly	Thr	Phe
65					70					75					80

Gly Pro Asn Leu Leu Thr Leu Trp Leu Phe Ser Asn Asn Leu Ser Thr  
 85 90 95  
 Ile Tyr Pro Gly Thr Phe Arg His Leu Gln Ala Leu Glu Glu Leu Asp  
 100 105 110  
 Leu Gly Asp Asn Arg His Leu Arg Ser Leu Glu Pro Asp Thr Phe Gln  
 115 120 125  
 Gly Leu Glu Arg Leu Gln Ser Leu His Leu Tyr Arg Cys Gln Leu Ser  
 130 135 140  
 Ser Leu Pro Gly Asn Ile Phe Arg Gly Leu Val Ser Leu Gln Tyr Leu  
 145 150 155 160  
 Tyr Leu Gln Glu Asn Ser Leu Leu His Leu Gln Asp Asp Leu Phe Ala  
 165 170 175  
 Asp Leu Ala Asn Leu Ser His Leu Phe Leu His Gly Asn Arg Leu Arg  
 180 185 190  
 Leu Leu Thr Glu His Val Phe Arg Gly Leu Gly Ser Leu Asp Arg Leu  
 195 200 205  
 Leu Leu His Gly Asn Arg Leu Gln Gly Val His Arg Ala Ala Phe His  
 210 215 220  
 Gly Leu Ser Arg Leu Thr Ile Leu Tyr Leu Phe Asn Asn Ser Leu Ala  
 225 230 235 240  
 Ser Leu Pro Gly Glu Ala Leu Ala Asp Leu Pro Ala Leu Glu Phe Leu  
 245 250 255  
 Arg Leu Asn Ala Asn Pro Trp Ala Cys Asp Cys Arg Ala Arg Pro Leu  
 260 265 270  
 Trp Ala Trp Phe Gln Arg Ala Arg Val Ser Ser Ser Asp Val Thr Cys  
 275 280 285  
 Ala Thr Pro Pro Glu Arg Gln Gly Arg Asp Leu Arg Thr Leu Arg Asp  
 290 295 300  
 Thr Asp Phe Gln Ala Cys Pro Pro Pro Thr Pro Thr Arg Pro Gly Ser  
 305 310 315 320  
 Arg Ala Arg Gly Glu Thr Ser Pro Gly Arg Pro Ala Ser Ala Gly Asn  
 325 330 335  
 Ala Leu Lys Gly Arg Val Pro Pro Gly Asp Thr Pro Pro Gly Asn Gly  
 340 345 350  
 Ser Gly Pro Arg His Ile Asn Asp Ser Pro Phe Gly Thr Leu Pro Gly  
 355 360 365  
 Ser Ala Glu Pro Pro Leu Thr Ala Leu Arg Pro Gly Gly Ser Glu Pro  
 370 375 380  
 Pro Gly Leu Pro Thr Thr Gly Pro Arg Arg Arg Pro Gly Cys Ser Arg  
 385 390 395 400  
 Lys Asn Arg Thr Arg Ser His Cys Arg Leu Gly Gln Ala Gly Ser Gly  
 405 410 415  
 Ser Ser Gly Thr Gly Asp Ala Glu Gly Ser Gly Ala Leu Pro Ala Leu  
 420 425 430  
 Ala Cys Ser Leu Ala Pro Leu Gly Leu Ala Leu Val Leu Trp Thr Val  
 435 440 445  
 Leu Gly Pro Cys  
 450

&lt;210&gt; 24

&lt;211&gt; 1358

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

 <223> Description of Artificial Sequence:/Note =  
 Synthetic Construct

&lt;400&gt; 24

 atgctgcccc ggctccggcg cctgctgcaa ggtcctgcct cagcctgcct cctgctgaca  
 ctccctggccc tccctcctgt gacccccagc tgccctatgc tctgcacctg ctactcctct

 60  
 120

```

ccgcccacag tgagctgcca ggccaacaac ttctcctcgg tgccgctgtc cttgccaccc 180
agtacacagc gactcttctt gcagaacaac ctcatcgtct cactgcggcc aggaactttt 240
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&lt;211&gt; 17

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:/Note =  
Synthetic Construct

&lt;400&gt; 25

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Thr Gly Pro Arg Arg Arg Pro Gly Cys Ser Arg Lys Asn Arg Thr Arg
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Leu

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&lt;210&gt; 26

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:/Note =  
Synthetic Construct

&lt;400&gt; 26

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Thr Ala Arg Pro Lys Arg Lys Gly Lys Cys Ala Arg Arg Thr
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&lt;210&gt; 27

&lt;211&gt; 5

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

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Synthetic Construct

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<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:/Note =  
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20

<210> 29

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =  
Synthetic Construct

<400> 29

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24